AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1-15 cancelled.

16. (new)   A method of processing images, comprising applying an anisotropic diffusion process to the image, the anisorropic diffusion process being adapted in dependence upon the contrast in the image.

17.   (new)   A method according to claim 16 wherein a diffusion coefficient in the anisotropic diffusion process is adapted in dependence upon the contrast in the image.

18.   (new)   A method according to claim 17 wherein the diffusion coefficient is calculated from the local contrast in the image.

19.   (new)   A method according to claim 18 wherein the diffusion coefficient is calculated from an average value of the local contrast in the image.

20.   (new)   A method according to claim 16 further comprising the steps of deriving a Gaussian derivative of the image and applying said anisotropic diffusion process to the SMF image.

21. (new) A method of processing images to segment objects in the image from background comprising applying a foveal segmentation algorithm to the image in which areas of the image are assigned to an object if the local contrast is greater than a minimum contrast value, wherein the minimum contrast value is defined with respect to the contrast in the image.

22. (new) A method according to claim 21 wherein the minimum contrast is calculated from an average value of the local contrast in the image.

23. (new) A method according to claim 21 wherein the local contrast is calculated from a weighted sum of the image intensities in the object and in the image.

24. (new) A method according to claim 21 further comprising the steps of deriving a Gaussian derivative of the image and applying said foveal segmentation algorithm to the SMF image.

25. (new) A method according to claim 19 wherein the average value of the local contrast in the image is calculated over the whole image.

26. (new) A method according to claim 22 wherein the average value of the local contrast in the image is calculated over the whole image.

27. (new)   A method of processing images, comprising applying an anisotropic

diffusion process to the image, the anisotropic diffusion process being adapted in

dependence upon the contrast in the image, the method further comprising

sementing the processed image using the foveal segmentation method of claim 21.

28. (new)   A method according to claim 16 wherein the image is an x-ray image.

29. (new)   A method according. to claim 16 wherein the image is a medical image.

30. (new) A method according to claim 16 wherein the image is a mammogram.

31. (new)   A method according to claim 30 further comprising the steps of

identifying areas of the processed image as representing microcalcifications.

32. (new)   A method according to claim 21 wherein the image is an x-ray image.

33. (new) A method according to claim 21 wherein the image is a medical image.

34. (new). A method according to claim 21 wherein the image is a mammogram.

35. (new) A method according to claim 34 further comprising the steps of identifying

areas of the processed image as representing microcalcifications.